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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER	
HAMO, PATRICK	
ART UNIT	**PAPER NUMBER**
3746	
NOTIFICATION DATE	**DELIVERY MODE**
10/23/2007	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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ED

	Application No.	Applicant(s)
Office Action Summary	10/685,716	BROSER ET AL.
	Examiner	**Art Unit**
	Patrick Hamo	3746

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *10 August 2007*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-3 and 5-14* is/are pending in the application.
  4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5)☐ Claim(s) _____ is/are allowed.
6)☒ Claim(s) *1-3 and 5-14* is/are rejected.
7)☐ Claim(s) _____ is/are objected to.
8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.
10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.
  Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
  Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  a)☐ All b)☐ Some * c)☐ None of:
    1.☐ Certified copies of the priority documents have been received.
    2.☐ Certified copies of the priority documents have been received in Application No. _____.
    3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
  * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
  Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413)
  Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

This action is in response to amendments filed on August 10, 2007.

Claim Objections

Claims 5 and 6 are objected to because of the following informalities: in amending the claims' dependencies, the applicant seems to have failed to delete the number "4" when replacing with a number "1". The examiner suspects this may be because the strike through is coincident with the horizontal line section of the number 4. Examiner suggests using double brackets as such: [[4]], to denote that the number 4 is being deleted. Appropriate correction is required.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1, 5, 8 and 11-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over applicants' admission of prior art in view of Elsasser et al., 5,901,754.

Applicants admit as prior art (fig.2, p.1, l. 3 – p.3, l. 2) an air-spring system of the type used in passenger vehicles with a muffler, designed for a passenger car, for the intake section (1) of a combined functional unit comprising air compressor (15) and air dryer (16), together with an air inlet (2) on the air compressor and an air outlet (3) that leads to the air dryer, while functional units that form the air-inlet path are disposed on the air inlet and functional units that form the air-outlet path are disposed on the air outlet, the functional units of the air-inlet and air-outlet paths forming intake section (1), which is designed as a combined intake section as air-inlet path units are also used for the air-outlet path, the combination of air compressor and air dryer provided with a pressure port (26), by which an air-spring system installed in the passenger car is supplied with air, wherein in the combined intake section (1) there is provided on air inlet (2), a first tubular air line (4), which is connected to an air-line tee (10), which on the outlet side is connected to the outlet (9) of an air filter (7), whose inlet (8) is connected to a third tubular air line (6), which ultimately provides the connection to the atmosphere (11); these functional units representing the air-inlet path, while an air outlet (3) is connected via a second tubular air line (5) to the branch of the air-line tee (10), so that air discharged by the air outlet flows through air filter (7) and third tubular air line (6) to the atmosphere (11). Together these functional units form the air-outlet path, wherein air filter (7) is composed of a pleated unit of air-permeable paper filter elements effecting air cleaning, and that both intake of air at the air inlet (2) by the air compressor (15) and discharge of air at the air outlet (3) by the air dryer (16) take place at different times; thus air from the air outlet (3) and air sucked in at the air inlet (2) pass through the air filter in different directions, with the effect of self-cleaning of the air filter. The dirt particles retained during air-inlet flow in the air filter are discharged to the atmosphere once again by the air-outlet air, and in addition to this function as a self-cleaning filter, the air filter also muffles the air noises.

However, applicants do not admit as prior art the following claimed limitations: a muffler formed as said third air line constructed and arranged to damp sound emissions from said compressed-air generating device, the third air-line is an elastic hose connection including an air-permeable, sound-absorbing insulating material and includes a throttle device adapted to narrow said third air-line in the region between said sound-absorbing insulating material and outlet to atmosphere, and a multi-functional muffling unit including said air filter and a muffler constructed and arranged to damp sound emissions from said compressed-air generating device.

Elsasser teaches a preassembled flexible conduit element (Abstract, l. 3 and col. 1, ll. 32-45) that decreases the noise level of a gas flowing through an air-permeable and insulating internal hose (6) and includes a portion of reduced diameter (17) between the noise absorbing region and the exhaust to atmosphere.

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to have modified the prior art admitted by the applicants with the preassembled flexible conduit element of Elsasser in order to reduce the noise level of the gas flow (col 1., ll. 56-61).

In regards to the claimed limitation of a multi-functional muffling unit including said air filter and a muffler constructed and arranged to damp sound emissions, this is a mere matter of making parts integral, which in itself does not establish patentable subject matter unless the result was contrary to the understandings and expectations of the art. See MPEP §2144.04(5)(b).

Claims 2 and 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over the references as applied to claims 1 and 8 above in view of Muto et al., 6,343,407.

The references teach all of the limitations as claimed and discussed above except for the following: the muffler is coupled to said air-consuming system by at least one of slip-on joints and clamp joints and the multi-functional muffling is coupled to said air-consuming system by at least one of slip-on joints and clamp joints.

Muto teaches a clamp 1 for connecting a hose H to a pipe at a joint as shown in fig. 1 for the purpose of attaching and sealing the hose onto the pipe.

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to have modified the references as applied to claims 1 and 8 with Muto in order to attach and seal the muffler or multi-functional muffling unit to the air-consuming system.

Claims 3 and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over the references as applied to claims 1 and 8 above in view of Hillyard, 4,573,251.

The references teach all of the limitations as claimed and discussed above except for the following: at least one of said first air-line, said second air-line, and said third air-line is formed by mandrel-sleeve-joint technique with a different one of said first air-line, said second air-line, and said third air-line.

Hillyard teaches a method for applying a tubular sleeve (12) of elastic material over an elongate body (10), comprising engaging an end portion of the sleeve over an end portion of the elongate body in order to position a sleeve on a mandrel and form a simple and efficient seal (col. 1, ll. 44-48).

Therefore it would have been obvious to one having ordinary skill in the art at the time the invention was made to have modified the references as applied to claims 1 and 8 above with Hillyard in order to form a simple and efficient seal (col. 1, ll. 44-48).

Claims 6-7 and 13-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over the references as applied to claims 4 and 12 above in view of Watson, 1,951,813, and further in view of Williamson et al., 2004/0023014.

The references as applied to claims 4 and 12 above teach all of the limitations substantially as claimed except the following: the sound-absorbing insulating material is formed from a meshed fabric of interconnected thermoplastic threads and is shaped as a knitted-fabric roll.

Watson teaches a mesh of wires (7,8) rolled into a helical form (see fig. 2) that when placed in a flow directs a gas flow therethrough (p. 2, ll. 130-132) and flattens out sharp periodic peaks of high pressure by introducing a resistance to flow of high velocity while offering very slight resistance to gases at low velocity (p. 1, ll. 48-71)

Therefore it would have been obvious to one having ordinary skill in the art at the time the invention was made to have modified the references as applied to claims 4 and 12 above by placing the mesh roll of Watson into the fluid conduit element of Elsasser in order to flatten out sharp periodic peaks of high pressure by introducing a resistance to flow of high velocity while offering very slight resistance to gases at low velocity (p. 1, ll. 48-71).

Williamson teaches that interconnected thermoplastic fibers make a very effective acoustical insulation material (p. 1, para. [0008]) and that provides the sound attenuation properties of bulkier materials while being able to be constructed relatively thinly (p. 1, para. [0006]) so that it can be used in locations where sound attenuation is needed but little space is provided (p. 4, para. [0046]).

Therefore it would have been obvious to one having ordinary skill in the art at the time the invention was made to have modified the references as applied to claims 4 and 12 above with Watson and further with Williamson in order to better attenuate sound in a location where little space is provided (p. 4, para. [0046]).

Response to Arguments

Applicant's arguments filed August 10, 2007 have been fully considered but they are not persuasive.

Applicant argues that Elsasser fails to teach or suggest that "the air-consuming system comprises a muffler formed as a third air line, whereby the third air line is an elastic hose connection that includes air-permeable, sound absorbing insulating material nor that the air-consuming system has a multi-functional muffling unit, whereby the unit includes an air filter and a muffler including an air-permeable, sound absorbing insulating material to damp sound emissions as claimed in independent claims 1 and 8, respectively."

However, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.,* 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986). In the instant case, applicant's admitted prior art teaches the air-consuming system comprising a third air line with an air filter, and it's the modification of this system by the hose of Elsasser that renders the invention obvious. Elsasser does teach a muffler formed as an air line that is an elastic hose connection with air-permeable, sound absorbing insulating material (see rejection above). The hose is used to guide gases and dampen vibrations and oscillations, hence it acts as a muffler.

Furthermore, there is reasonable expectation for one of ordinary skill to be motivated to combine the teachings of Elsasser with the admitted prior art because it has been held that a prior art reference must either be in the field of applicant's endeavor or, if not, then be reasonably pertinent to the particular problem with which the applicant was concerned, in order to be relied upon as a basis for rejection of the claimed invention. See *In re Oetiker*, 977 F.2d 1443, 24 USPQ2d 1443 (Fed. Cir. 1992). In this case, Elsasser teaches a construction for reducing turbulence and noise produced by a flowing gas, whether it be exhaust or intake.

Applicant further argues that Elsasser appears to teach away from the present claimed invention as the hose element contemplated by Elsasser is made of metallic wires. However, examiner is unsure which portion of the claimed limitations this contradicts, as the material of the hose was not claimed and there is no limitation specifically restricting the hose to non-metal materials.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Patrick Hamo whose telephone number is 571-272-3492. The examiner can normally be reached on M-F 8:30-5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Devon Kramer can be reached on 571-272-7118. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

PH

Devon Kramer
Supervisory Patent Examiner
Art Unit 3746

DEVON C. KRAMER
PATENT EXAMINER

10/17/07